## IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS **AUSTIN DIVISION**

VLSI TECHNOLOGY LLC,

Plaintiff,

**Lead Case:** 1:19-cv-977-ADA

v.

(Consolidated with Nos. 6:19-cv-254-ADA, 6:19-cv-255-ADA, 6:19-cv-256-ADA)

INTEL CORPORATION,

Defendant.

### **DECLARATION OF CATHERINE L. TROISI, Ph.D.**

- I, Catherine L. Troisi, declare as follows:
- 1. I have personal knowledge of the matters discussed in this declaration, or have looked into the matters and believe them to be correct based on the best of my knowledge after a reasonable investigation.

#### I. INTRODUCTION AND COMPENSATION

2. I have been asked by VLSI's counsel to opine on the safety of conducting trial in person at the Federal Courthouse in Waco, Texas for the United States District Court for the Western District of Texas in January 2021 in light of the novel coronavirus, as well as to provide a suggested COVID-19 safety protocol for trial. I have also considered whether the existence of a potential COVID-19 vaccine is likely to have a material impact on the relative safety of conducting a trial in late-March/early-April 2021 as compared to starting trial on January 11, 2021.

- 3. Based on my 40 years of experience as an epidemiologist and work in public health in the area of infectious disease epidemiology specializing in viruses, my in-person inspection of the Waco courthouse, and a variety of other matters, I have reached the following conclusions, which are supported in more detail by the discussion that follows:
  - It is highly unlikely SARS-CoV-2 transmission would occur during a trial in Waco, Texas in January 2021 if the participants follow my outlined safety protocol. This is true even if one of the trial participants was already infected with SARS-CoV-2 and infectious at the time trial begins.
  - Trial in Waco, Texas in January 2021 can be conducted safely with very minimal risk of SARS-CoV-2 transmission, if proper precautions are taken.
  - Even if the COVID-19 vaccines that are currently awaiting FDA approval ultimately prove to be safe and effective and receive swift FDA approval, the existence of the vaccines will not have a material impact on the relative safety of conducting a trial in Waco (or Austin) starting on January 11 versus late March or early April 2021. Among other reasons, a COVID-19 vaccine is unlikely to reach the general population until at least mid-2021 and furthermore, it is anticipated that a significant portion of the population will resist taking the vaccine.

#### II. BACKGROUND AND QUALIFICATIONS

4. I am an infectious disease epidemiologist and public health expert as well as an Associate Professor in the Department of Management, Policy, and Community Health and Department of Epidemiology, Human Genetics, and Environmental Sciences and Center for

Infectious Diseases at the University of Texas Health Science Center at Houston, School of Public Health (UTSPH) and an Adjunct Associate Professor at Baylor College of Medicine.

- 5. I received a B.A. in Chemistry from The University of Rochester (NY) in 1974, an M.S. in Biochemistry from Michigan State University in 1975, and a Ph.D. in Epidemiologic Sciences from The University of Michigan in 1980, specializing in influenza studies. I completed a postdoctoral position at Baylor College of Medicine in the Department of Virology and Epidemiology. I am a graduate of the National Public Health Leadership Institute at the University of North Carolina and have received post-doctoral training in epidemiologic techniques and public health preparedness.
- 6. My forty-year career in public health has been in the area of infectious disease epidemiology specializing in viruses. I was on the faculty in the Department of Virology and Epidemiology at Baylor College (the name was changed to Department of Molecular Virology during my tenure there) from 1983-1996, and I joined the faculty at the University of Texas Health Science Center at Houston School of Public Health in Disease Control and Biological Sciences in 1997. I left academia in 2003 for seven years to practice public health at the Houston Health Department, beginning as Bureau Chief for HIV/STD and Viral Hepatitis Prevention, was promoted to Assistant Director of the Health Department, overseeing the Division of Prevention and Communicable Diseases, and finally created and filled a new position as Director of Public Health Practice. I rejoined the UTSPH faculty in 2010, in the Departments of Management, Policy, and Community Health and Epidemiology, Human Genetics, and Environmental Sciences and the Center for Infectious Diseases.
- 7. I was Incident Commander in the National Incident Management System structure (i.e., in charge of the Houston Health Department's response) in 2009 for the H1N1 influenza pandemic, a respiratory virus.

- 8. I am also currently an elected Executive Board Member of the American Public Health Association, a Board Member of International Network of Epidemiology in Policy, an Elected Fellow of the Texas Public Health Association, a member of the National Association of County and City Health Officials epidemiology workgroup, and a member of the American College of Epidemiology. I have received several awards and honors including the Excellence in Community Service Award at UTSPH in 2013 and 2019, and the Association of Schools and Programs in Public Health Service Award in 2018. I was elected to Sigma Xi (Scientific Honor Society) in 1979, received a fellowship from the University of Michigan for the years 1977-1980, and was a Eugene B. Casey Fellow at Baylor College of Medicine. In the past four years, I have testified before the U.S. House of Representatives Committee on Homeland Security, Ebola Preparedness (October 2014, Dallas, TX), Governor Perry's Task Force on Public Health Prevention, Ebola Preparedness (October 2014, Austin, TX), and the Texas House County Affairs Committee, Syringe Exchange Programs (April 2019, Austin, TX). I am also on several COVID-19 advisory committees and am advising the Texas legislature workgroup on safe conduct of business during the upcoming Texas Legislative Session.
- 9. Attached as Exhibit A, and incorporated by reference, is a copy of my curriculum vitae.

#### III. MATTERS CONSIDERED

10. In formulating my opinions, I have used my extensive knowledge in epidemiology, my extensive work on the containment and risks of the novel coronavirus and research, including the materials discussed and cited in this declaration, <sup>1</sup> census data, COVID-

<sup>&</sup>lt;sup>1</sup> I understand that all of the numbered exhibits cited in my declaration are being attached to the Declaration of Iian Jablon.

19 testing data, the facts of this case and upcoming trial, and my inspection of physical premises of the U.S. District Court for the Western District of Texas, Waco Division.

- 11. As part of my analysis, I have been informed of the following facts, each of which was taken into account in coming to my opinions:
  - There are two parties to this litigation: Plaintiff VLSI Technology LLC and Defendant Intel Corporation.
  - The case is a patent case and does not involve minors or others who cannot abide by medical guidelines or otherwise act in a socially responsible manner.
  - The trial is scheduled to begin on January 11, 2020 in the U.S. District
     Court for the Western District of Texas, Waco Division before Judge
     Albright.
  - Each party is represented by both Texas counsel and out-of-state counsel. Attorneys for VLSI are physically located in Texas and California. Attorneys for Intel are physically located in a number of states throughout the United States. Both Texas and out-of-state counsel for each party will be present at trial.
  - At trial each party will have party representatives, counsel, and other support in the courtroom, with additional persons at an off-site location.
  - Witnesses at trial (those who decide to appear in person) may be coming from numerous states, including a single witness who may be travelling from Israel.

• The trial may take up to approximately two weeks to complete, with most trial participants physically present at the courthouse for approximately eight hours per business day.

#### IV. BRIEF OVERVIEW OF COVID-19

- 12. COVID-19 is the disease caused by the SARS-CoV-2 virus. These two terms are often used interchangeably.
- 13. SARS-CoV-2 caused a worldwide pandemic, which likely started in late-2019 and was internationally recognized by March-2020. SARS-CoV-2, and the resulting COVID-19 infections, has dramatically altered the way in which individuals in the United States and around the world live their daily lives. Although significant research has been done on the virus and disease since its identification, our understanding of the disease is still in the early stages. There are still numerous key unknowns, including issues surrounding viral mutation and reinfection.<sup>2</sup>
- 14. Medical professionals and the public will continue to contend with COVID-19 prevention, spread, and treatment for many years to come. The virus and disease will not be eradicated in the foreseeable future and may become endemic.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Ex. 1, Jop de Vrieze, More people are getting COVID-19 twice, suggesting immunity wanes quickly in some. *Science*. Nov. 18, 2020, <a href="https://www.sciencemag.org/news/2020/11/more-people-are-getting-covid-19-twice-suggesting-immunity-wanes-quickly-some">https://www.sciencemag.org/news/2020/11/more-people-are-getting-covid-19-twice-suggesting-immunity-wanes-quickly-some</a>; Ex. 2, Ewen Callaway, The Coronavirus is mutating—does it matter? *Nature*. Sept. 8, 2020, (Correction Sept. 16, 2020), <a href="https://www.nature.com/articles/d41586-020-02544-6">https://www.nature.com/articles/d41586-020-02544-6</a>.

<sup>&</sup>lt;sup>3</sup> Ex. 3, Jeffrey Shaman, et al., Will SARS-CoV-2 become endemic? *Science* Vol. 370 #6516 pp 527-529. Oct. 30, 2020, <a href="https://science.sciencemag.org/content/370/6516/527">https://science.sciencemag.org/content/370/6516/527</a>.

- 15. At this time, SARS-CoV-2 is believed to be transmitted primarily through respiratory droplets (projected in the air from sneezing, coughing, or loud speaking),<sup>4</sup> with an unknown amount of aerosol transmission,<sup>5</sup> and very rare surface transmission. Spread through each of these avenues can be effectively prevented by the use of proper hygiene and preventative measures.<sup>6</sup>
- 16. The greatest sources of SARS-CoV-2 transmission are from social settings, often involving food, drinks, or exercise.<sup>7</sup> These activities involve crowded areas of individuals not practicing proper hygiene, including a lack of masks and close contact. A highly-cited peer-reviewed study published in *Nature* found that the vast majority of all COVID-19 infections in the period studied occurred at restaurants, gyms, cafes, and other

<sup>&</sup>lt;sup>4</sup> Ex. 4, How to Protect Yourself and Others, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html">https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html</a> (Updated Nov. 27, 2020).

<sup>&</sup>lt;sup>5</sup> Ex. 5, Scientific Brief: SARS-CoV-2 and Potential Airborne Transmission, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html">https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html</a> (Updated Oct. 5, 2020).

<sup>&</sup>lt;sup>6</sup> Id.

<sup>&</sup>lt;sup>7</sup> Data came from a study of 10 large cities across American, including Dallas and Houston. Ex. 6, Chang, S., Pierson, E., Koh, P.W., et al. Mobility network models of COVID-19 explain inequities and inform reopening. Nature. Nov. 10, 2020, https://doi.org/10.1038/s41586-020-2923-3; Ex. 7, Benedict Carey, Limiting Indoor Capacity Coronavirus Infections. Study Shows. The New York Times. https://www.nytimes.com/2020/11/10/health/covid-indoor-venuesinfections.html?smtvp=cur&smid=tw-nytnational (Updated Nov. 19, 2020). Similarly findings were made in Massachusetts, citing indoor dining and gyms as primary sources of spread. Ex. 8, Laura Crimaldi, New survey tracks rise in activities that spread COVID-19 in Massachusetts. The Boston Globe, https://www.bostonglobe.com/2020/11/14/metro/newsurvey-tracks-rise-activities-that-spread-covid-19-massachusetts/ (Updated Nov. 14, 2020). The same article cites the Massachusetts's COVID-19 Command Center as pointing to "informal gatherings where people let down their guard and don't wear masks" as the source of most new infections.

crowded indoor venues, with restaurants providing the highest levels of transmission risk, likely due to the lack of face masks and minimal social distancing.<sup>8</sup>

#### V. MEASURES TO AMELIORATE SARS-C<sub>0</sub>V-2 TRANSMISSION

- 17. The prophylactic measures with the most significant impact on preventing the spread of SARS-CoV-2 are the use of masks, social distancing, frequent handwashing, environmental disinfection, and monitoring daily health to identify symptoms as early as possible with concomitant contact tracing.<sup>9</sup>
- 18. Multi-layer cloth masks have been found to block most exhaled large droplets (which are believed to be responsible for the majority of viral transmission) and up to 50-70% of exhaled fine droplets (i.e. aerosols). They have similarly been found to prevent inhaled large and fine droplets and particles, providing significant protection to the wearer. Anecdotal data has shown the prevention of SARS-CoV-2 transmission from the use of masks in individuals in close contact with known COVID-19 positive persons. Surgical masks are

<sup>&</sup>lt;sup>8</sup> The study found that capping occupancy at 20% of the maximum occupancy in the Chicago metro area reduced the predicted number of new infections by more than 80%. Ex. 6, Chang, S., Pierson, E., Koh, P.W., *et al.* Mobility network models of COVID-19 explain inequities and inform reopening. *Nature*. Nov. 10, 2020, <a href="https://doi.org/10.1038/s41586-020-2923-3">https://doi.org/10.1038/s41586-020-2923-3</a>.

<sup>&</sup>lt;sup>9</sup> Ex. 4, How to Protect Yourself and Others, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html">https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html</a> (Updated Nov. 27, 2020).

<sup>&</sup>lt;sup>10</sup> Ex. 9, Scientific Brief: Community Use of Cloth Masks Control the Spread of SARS-CoV-2, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/more/masking-science-sars-">https://www.cdc.gov/coronavirus/2019-ncov/more/masking-science-sars-</a>

<sup>&</sup>lt;u>cov2.html?fbclid=IwAR28PppCa6x2uxwO8Z2baHM0KHS4JXx0inzzMQs3zRHV1qql\_0a8mxZfpCw</u> (Updated Nov. 20, 2020).

<sup>&</sup>lt;sup>11</sup> Id.

<sup>&</sup>lt;sup>12</sup> Id.

believed to provide even greater protection than cloth masks, <sup>13</sup> with N95 masks providing almost complete protection to the wearer, blocking (as the name suggests) 95% of very fine particles. <sup>14</sup>

- 19. Additional barriers can provide further protection. Such barriers include face shields and/or other items that create a physical barrier between individuals, such as the use of plexiglass guards or partitions.
- 20. Social (also called physical) distancing refers to maintaining a distance of at least six feet between persons. Social distancing is a proven method to stop the spread of viruses such as the novel coronavirus through the respiratory route. As noted, SARS-CoV-2 is spread through respiratory droplet transmission. The droplets are fairly heavy, and most studies have shown that they cannot travel more than approximately six feet which is the adopted CDC guidance, although under certain circumstances, they can travel a longer

<sup>&</sup>lt;sup>13</sup> "Both surgical masks and unvented KN95 respirators, even without fit-testing, reduced outward particle emission rates by 90% and 74% on average during speaking and coughing, respectively, compared to wearing no mask, corroborating their effectiveness at reducing outward emission." Ex. 10, Asadi, S., et al. Efficacy of masks and face coverings in controlling outward aerosol particle emission from expiratory activities. *Sci Rep* 10, 15665. Sep. 24, 2020, https://doi.org/10.1038/s41598-020-72798-7.

<sup>&</sup>lt;sup>14</sup> Ex. 11, Mayo Clinic, COVID-19: How much protection do face masks offer? Released Aug. 20, 2020, <a href="https://www.mayoclinic.org/diseases-conditions/coronavirus/indepth/coronavirus-mask/art-20485449">https://www.mayoclinic.org/diseases-conditions/coronavirus/indepth/coronavirus-mask/art-20485449</a>.

<sup>15</sup> Ex. 12, Letter from Harvey V. Fineberg, M.D., Ph.D., Chair, Standing Comm. On Emerging Infectious Diseases & 21st Century Health Threats, Nat'l Acads. of Scis. Eng'g Med., to Kelvin Droegemeier, Ph.D., Exec. Off. of President, Off. of Sci. & Tech. Pol'y, Rapid Expert Consultation on Social Distancing for the COVID-19 Pandemic. Mar. 19, 2020, <a href="https://www.nap.edu/catalog/25753/rapid-expert-consultation-on-social-distancing-for-the-COVID-19-pandemic-march-19-2020">https://www.nap.edu/catalog/25753/rapid-expert-consultation-on-social-distancing-for-the-COVID-19-pandemic-march-19-2020</a>.

<sup>16</sup> Ex. 13, Social Distancing, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html">https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html</a> (Updated Nov. 17, 2020).

distance.<sup>17</sup> The benefit of social distancing is magnified when taking other precautions. For example, when wearing mask, a significant portion of these droplets are stopped by the physical barrier and the ones that are not stopped by the mask are unable to travel as far.<sup>18</sup>

- 21. Frequent handwashing and environmental disinfection are also recommended because the virus can be spread when, for example, an infected person coughs into his or her hand and touches a surface which is subsequently touched by another individual. Transmission from person to person in this way can be ameliorated through improved personal hygiene (handwashing, use of hand sanitizer, avoiding touching one's face or sneezing/coughing into one's hands) and environmental disinfection procedures (wiping down high touch areas such as door handles, light switches, etc.). Surface transmission of the virus is believed to be minimal, but such risk can still be avoided by taking such basic precautions as handwashing and surface disinfection.<sup>19</sup>
- 22. Daily health monitoring is an additional method by which to provide protection against transmission by screening out those symptomatic or mildly-symptomatic individuals from interacting with others. Although transmission can occur from both symptomatic and asymptomatic individuals, basic health monitoring and screening questions can provide

<sup>17</sup> Ex. 14, Hongying Li, et al., Dispersion of evaporating cough droplets in outdoor environment, *Physics of Fluids* 32, 113301. Nov. 3, 2020, <a href="https://aip.scitation.org/doi/10.1063/5.0026360">https://aip.scitation.org/doi/10.1063/5.0026360</a>.

<sup>18</sup> Ex. 15, Siddhartha Verma, et al., Visualizing the effectiveness of face masks in obstructing respiratory jets, *Physics of Fluids* 32, 061708. June 30, 2020, <a href="https://doi.org/10.1063/5.0016018">https://doi.org/10.1063/5.0016018</a>; Ex. 16, Daniel Ellman, 4 Mask Myths That Put You At Risk, *Michigan Health*. Sep. 9, 2020, <a href="https://healthblog.uofmhealth.org/wellness-prevention/4-mask-myths-put-you-at-risk">https://healthblog.uofmhealth.org/wellness-prevention/4-mask-myths-put-you-at-risk</a>.

<sup>19</sup> Ex. 17, Cleaning and Disinfection for Households, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html">https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html</a> (Updated July 10, 2020).

protection from a significant percentage of infectious individuals. Once an infected person is identified and reported to a health department, contact tracing notifies persons who have been in contact with the case, so that they can quarantine until it is clear they have not been infected to prevent further spread.<sup>20</sup>

23. Numerous additional safety measures exist including measures that provide further protection from aerosols (such as improving ventilation, whether by being outside, reducing capacity in an indoor space, and the use of air filtration systems),<sup>21</sup> surface transmission (not sharing tools or supplies between individuals, and having a designated individual open doors or turn on lights), and the risk that one will be in contact with an infected and infectious individual (testing). These additional safety precautions mitigate against viral transmission in the event an individual does come in contact with someone who is infectious.

#### VI. INFECTION RATES AND LIMITATIONS ON DATA

24. The infection (and infectiousness) rate in the United States is unknown. Rough estimations are made via the collection of SARS-CoV-2 testing data. Such data provides important qualitative information on infection rates, but cannot provide true quantitative information on infection rates. Further, because SARS-CoV-2 is primarily detected through use of a reverse-transcriptase polymerase chain reaction ("RT-PCR") test, a recovered and

<sup>&</sup>lt;sup>20</sup> Ex. 18, Contact tracing slows the spread of COVID-19, CDC, https://tinyurl.com/y445d98d (Updated Dec. 3, 2020).

<sup>&</sup>lt;sup>21</sup> Ex. 19, Considerations for Events and Gatherings, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/considerations-for-events-gatherings.html">https://www.cdc.gov/coronavirus/2019-ncov/community/large-events/considerations-for-events-gatherings.html</a> (Updated Nov. 17, 2020).

non-infectious individual can continue to test positive months after infection due to remnant viral fragments in his or her system.<sup>22</sup>

- 25. The primary limitations on current testing data include (1) limited testing capabilities and changes in such abilities over time, and (2) bias in testing population. Among other limits in testing capability, some experts believe not enough tests are being performed in Texas, and there is often a delay in reporting testing data to health departments meaning that current numbers of cases often reflect what was happening days or weeks previously.<sup>23</sup> The testing data often consists of a self-selected subset of the population which most often artificially inflates the rate of positivity. Individuals testing are primarily those in the highest risk categories for being positive, such as individuals exhibiting disease symptoms, individuals with known exposure to an individual with COVID-19, and individuals in hospitals or other care facilities.<sup>24</sup>
- 26. Testing is an important tool in the global fight against SARS-CoV-2, but general testing data is an unreliable metric for quantitative infection rates, and provides less useful data on rate of infectiousness (i.e., the ability to spread the virus).
- 27. As related to the matter of whether trial can be held safely in Waco, Texas in January 2021, general testing data is of further limited utility. As an initial matter, I understand that each of the primary categories of individuals getting tested (those who are symptomatic,

<sup>&</sup>lt;sup>22</sup> Ex. 20, Jamie Ducharme, What to Know About COVID-19 Tests, From PCR to Antigen to Antibody, *Time*. Aug. 20, 2020, <a href="https://time.com/5880255/covid-19-tests-types/">https://time.com/5880255/covid-19-tests-types/</a>.

<sup>&</sup>lt;sup>23</sup> Ex. 21, William Wan, Long lines and delayed results again plague coronavirus tests as Thanksgiving approaches. *The Washington Post*. Nov. 18, 2020, https://www.washingtonpost.com/health/2020/11/18/coronavirus-thanksgiving-test/.

<sup>&</sup>lt;sup>24</sup> Ex. 22, Daniel Andres Diaz-Pachon and J. Sunil Rao, A simple correction for covid-19 testing bias. NIH preprint July 15, 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7373135/.

those who have been in close contact with an individual diagnosed with COVID-19, and those in a hospital) would be prevented from entering the courthouse or participating in the trial. Such individuals would be identified through a health screening test, both by questionnaire of possible exposure and by taking temperatures as the individual enters the courthouse, with individuals demonstrating a fever not being admitted as required by the proposed protocol.

28. Further, individuals at high risk for being infected who have not been tested, such as symptomatic individuals who decide not to test, or those with known contact with an infected individual, are likewise excluded from the pool of individuals who are currently permitted to enter the courthouse.

#### VII. COVID-19 VACCINE AVAILABILITY AND ADMINISTRATION

29. There are currently two front-runners in the race to a COVID-19 vaccine in the United States seeking FDA Emergency Use Authorization.<sup>25</sup> The creation and testing of a COVID-19 vaccine has been an incredible scientific and industry accomplishment, with the front-runners creating and testing a vaccine in less than nine months. Previously, fast-tracked vaccines have taken many years in development.

<sup>25</sup> The current front-runners are Pfizer partnering which BioNTech, and Moderna. Based on press release statements, the vaccines are targeted at reducing incidence of COVID-19, but are silent on rate of SARS-CoV-2 infectiousness of those in the test group receiving the vaccine. Ex. 23, Pfizer and BioNTech Conclude Phase 3 Study of COVID-19 Vaccine Candidate, Meeting All Primary Efficacy Endpoints, *BusinessWire*, Released Nov. 18, 2020, <a href="https://www.businesswire.com/news/home/20201118005595/en/">https://www.businesswire.com/news/home/20201118005595/en/</a>. Pfizer's chairman stated that Pfizer is not certain whether the vaccine prevented the transmission of SARS-CoV-2. Ex. 24, Joseph Choi, Pfizer chairman: We're not sure if someone can transmit virus after vaccination, *The Hill*. Dec. 3, 2020, <a href="https://thehill.com/news-by-subject/healthcare/528619-pfizer-chairman-were-not-sure-if-someone-can-transmit-virus-after">https://thehill.com/news-by-subject/healthcare/528619-pfizer-chairman-were-not-sure-if-someone-can-transmit-virus-after</a>.

Other vaccines have been authorized for emergency use in other countries, but have not received authorization in the United States, and there are at least 51 vaccine candidates in clinical evaluation and at least 163 in preclinical evaluation. Ex. 25, WHO, Draft landscape of COVID-19 candidate vaccines, <a href="https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines">https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines</a> (Updated Dec. 2, 2020).

- 30. However, this scientific accomplishment is only one of the numerous measures in combatting SARS-CoV-2 spread and COVID-19 infections. Vaccines, even assuming they prove to be safe and effective, will not eradicate the virus or infections, at least not in the foreseeable future.<sup>26</sup> Masks and social distancing will still be necessary even after the vaccine becomes available.
- 31. Even under ideal conditions and without production delays, vaccine availability is not expected to reach the quantities necessary for access to the general population until mid-2021, with the Texas Department of State Health Services announcing that they hope to start vaccinating the general public by July 2021.<sup>27</sup> As one illustration, Moderna announced that it hopes to supply between 100 and 125 million COVID-19 vaccine doses *globally* in Q1 2021.<sup>28</sup> The population of the United States alone is greater than 330 million.<sup>29</sup> As another illustration, Pfizer has told the U.S. that even if its production proceeds as planned, it will not be able to supply substantial additional vaccines to the U.S. until late-

<sup>&</sup>lt;sup>26</sup> Ex. 26, Jackie Salo, Social distancing, masks still necessary after getting COVID-19 vaccine: Fauci, *The New York Post*, <a href="https://nypost.com/2020/11/15/social-distancing-masks-necessary-after-getting-vaccine-fauci/">https://nypost.com/2020/11/15/social-distancing-masks-necessary-after-getting-vaccine-fauci/</a> (Updated Nov. 15, 2020).

<sup>&</sup>lt;sup>27</sup> Ex. 27, Sara Willa Ernst and Paul DeBenedetto, General public could receive vaccinations by July, Texas health officials say, Houston Public Media, Univ. of Houston. Dec. 7, 2020, <a href="https://www.houstonpublicmedia.org/articles/news/health-science/coronavirus/2020/12/07/387326/general-public-could-receive-vaccinations-by-july-texas-health-officials-say/amp/">https://www.houstonpublicmedia.org/articles/news/health-science/coronavirus/2020/12/07/387326/general-public-could-receive-vaccinations-by-july-texas-health-officials-say/amp/</a>.

<sup>&</sup>lt;sup>28</sup> Ex. 28, Moderna to supply up to 125 million COVID-19 vaccine doses globally in first quarter, *Reuters*. Dec. 3, 2020, <a href="https://www.reuters.com/article/us-health-coronavirus-moderna-to-supply-100-to-125-million-covid-19-vaccine-doses-globally-in-first-quarter-idUSKBN28D3FA">https://www.reuters.com/article/us-health-coronavirus-moderna-to-supply-100-to-125-million-covid-19-vaccine-doses-globally-in-first-quarter-idUSKBN28D3FA</a>.

Ex. 29, U.S. and World Population Clock, United States Census, <a href="https://www.census.gov/popclock/">https://www.census.gov/popclock/</a> (Last Accessed Dec. 9, 2020).

June or July 2021.<sup>30</sup> This means that the additional 100 million vaccine doses ordered by the U.S. will not be received by spring, and the U.S. may at best receive 50 million doses at the end of Q2 2021 and the remainder in Q3 2021.<sup>31</sup> Further, both the Pfizer and Moderna vaccines require two doses per individual, which cuts the available doses in half in terms of the number of individuals to whom vaccines are available. Moreover, it remains to be seen how many doses of vaccine will actually be delivered in 2021. As one example, Pfizer recently announced that it would only be able to ship only half as many vaccines this year as originally planned because of unexpected quality control issues with its raw materials.<sup>32</sup> This means fewer vaccines available and longer wait times for front-line workers, those at high risk for serious complications from a COVID-19 infection, and the general public.

32. Vaccine availability is further strained by the currently unknown nature of immunity to the SARS-CoV-2 virus (as well as the mutation potential). In particular, scientists do not yet know how long immunity to this new virus lasts and whether and after how long reinfection can occur. Decades of research on other coronaviruses have shown that protective immunity is short-lived.<sup>33</sup> This means that achieving lasting immunity from a vaccine may

<sup>&</sup>lt;sup>30</sup> Ex. 30, Laurie McGinley, et al., Pfizer tells U.S. officials it cannot supply substantial additional vaccine until late June or July. *The Washington Post*. Dec. 7, 2020, <a href="https://www.washingtonpost.com/health/2020/12/07/pfizer-vaccine-doses-trump/">https://www.washingtonpost.com/health/2020/12/07/pfizer-vaccine-doses-trump/</a>.

<sup>&</sup>lt;sup>31</sup> Id.

<sup>&</sup>lt;sup>32</sup> Ex. 31, Costas Paris, Pfizer Slashed Its Original Covid-19 Vaccine Rollout Target After Supply-Chain Obstacles, *The Wall Street Journal*, <a href="https://www.wsj.com/articles/pfizer-slashed-its-covid-19-vaccine-rollout-target-after-facing-supply-chain-obstacles-11607027787">https://www.wsj.com/articles/pfizer-slashed-its-covid-19-vaccine-rollout-target-after-facing-supply-chain-obstacles-11607027787</a> (Updated Dec. 3, 2020).

<sup>33</sup> Ex. 32, Arthur W.D. Edridge, et al., Human coronavirus reinfection dynamics: lessons for SARS-CoV-2, May 18, 2020, https://www.medrxiv.org/content/10.1101/2020.05.11.20086439v1.full.pdf.

require additional administrations after a number of months,<sup>34</sup> putting additional strains on the vaccine supply.

- 33. Further, the vaccines must not only be available in sufficient quantities, but must be able to be properly disseminated and administered to hundreds of millions of Americans. This is a particularly onerous task and has little historical precedent. This includes, for example, the expected difficulties of physically transporting vaccines in the correct volumes to the necessary locations, tasking individuals to administer the vaccines, and providing administrative information to the public such that each individual may properly receive a vaccination, all without any current federal funding for state activities distributing the vaccine. Existing state and local governmental distribution networks are primarily focused on delivering childhood vaccinations and so sufficient networks do not exist for vaccinating adults, meaning state and local governments will have to significantly increase their methods, sites, and partnerships for a COVID-19 vaccine. 36
- 34. But this task is made even more difficult by logistical concerns specific to the vaccines such as, in regard to the Pfizer vaccine, delivery including the need for ultra-low temperature storage and shipments with dry ice to prevent vaccine destruction,<sup>37</sup> the ability of a receiving institution to receive and administer the minimum order requirement of the Pfizer

<sup>&</sup>lt;sup>34</sup> Ex. 33, When to Quarantine, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/quarantine.html">https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/quarantine.html</a> (Updated Dec. 2, 2020) (suggesting immunity for 3 months).

<sup>&</sup>lt;sup>35</sup> Ex. 34, Josh Michaud and Jennifer Kates, Distributing a COVID-19 vaccine across the U.S. – A look at key issues, Oct. 20, 2020, <a href="https://www.kff.org/report-section/distributing-a-covid-19-vaccine-across-the-u-s-a-look-at-key-issues-issue-brief/">https://www.kff.org/report-section/distributing-a-covid-19-vaccine-across-the-u-s-a-look-at-key-issues-issue-brief/</a>.

<sup>&</sup>lt;sup>36</sup> Id.

<sup>&</sup>lt;sup>37</sup> Ex. 35, David Z. Morris, Pfizer's COVID vaccine comes with a chilly complication. But that may change. *Fortune*. Nov 28, 2020, <a href="https://fortune.com/2020/11/28/pfizer-covid-vaccine-cold-storage-update/">https://fortune.com/2020/11/28/pfizer-covid-vaccine-cold-storage-update/</a>.

vaccine (975 doses) within a short period of time to avoid expiry after the batch is brought out of sub-zero conditions.<sup>38</sup> and the necessity of two doses.

- 35. Further complicating the matter are supply concerns for necessary vaccine paraphernalia. For example, because of the ultra-low temperature storage requirements for the Pfizer vaccine, it is unknown whether the market can meet the need for dry ice. Additionally, it is believed that there are insufficient quantities of drug delivery needles.<sup>39</sup>
- 36. Moreover, and in any event, unless the United States or individual states<sup>40</sup> requires vaccination of all individuals—without exceptions and with necessary enforcement action to ensure compliance—it is likely that there will be a significant portion of the public that refuses to take a vaccine even when it finally becomes broadly available. For example, 62% of polled Americans say they would be uncomfortable being the first to receive vaccine, with almost 40% saying they would be uncomfortable getting the vaccine at any time.<sup>41</sup> Even in the very high adoption communities, such as healthcare workers, the adoption rate is

<sup>&</sup>lt;sup>38</sup> Ex. 36, Laurie McGinley, et al., Pfizer coronavirus vaccine could be cleared by mid-December following release of data showing it is more than 90 percent effective, *The Washington Post*. Nov. 9, 2020, <a href="https://www.washingtonpost.com/health/2020/11/09/covid-vaccine-in-december/">https://www.washingtonpost.com/health/2020/11/09/covid-vaccine-in-december/</a>.

<sup>&</sup>lt;sup>39</sup> Ex. 37, Mari Serebrov, Shortage of needles, syringes looms in race to develop COVID-19 vaccine, *BioWorld*. May 8, 2020, <a href="https://www.bioworld.com/articles/434969-shortage-of-needles-syringes-looms-in-race-to-develop-covid-19-vaccine">https://www.bioworld.com/articles/434969-shortage-of-needles-syringes-looms-in-race-to-develop-covid-19-vaccine</a>; Ex. 38, BD gears up for injection device demand for COVID-19 vaccine, MDDI. Nov. 12, 2020, <a href="https://www.mddionline.com/covid-19/bd-gears-injection-device-demand-covid-19-vaccine">https://www.mddionline.com/covid-19/bd-gears-injection-device-demand-covid-19-vaccine</a>.

<sup>&</sup>lt;sup>40</sup> Texas Governor Abbott has announced that the COVID-19 vaccine will not be mandatory. Ex. 39, Jennifer Kendall, Gov. Abbott says COVID vaccine will not be mandatory for Texans, *Fox7 Austin*, Nov. 24, 2020, <a href="https://www.fox7austin.com/news/gov-abbott-says-covid-vaccine-will-not-be-mandatory-for-texans">https://www.fox7austin.com/news/gov-abbott-says-covid-vaccine-will-not-be-mandatory-for-texans</a>.

<sup>&</sup>lt;sup>41</sup> Ex. 40, Cary Funk and Alec Tyson, Intent to get a COVID-19 vaccine rises to 60% as confidence in research and development process increases, *Pew Research Center*, Dec. 3, 2020, <a href="https://www.pewresearch.org/science/2020/12/03/intent-to-get-a-covid-19-vaccine-rises-to-60-as-confidence-in-research-and-development-process-increases/">https://www.pewresearch.org/science/2020/12/03/intent-to-get-a-covid-19-vaccine-rises-to-60-as-confidence-in-research-and-development-process-increases/</a>.

expected to only be around 75-80%.<sup>42</sup> Population-level benefits of vaccination come with what is known as herd immunity. Herd immunity happens when a high percentage of people in a community become immune to an infectious disease (one that is spread person to person), so that it stops or slows the disease from spreading. This can happen through natural infection or through vaccination. In most cases, 80-95% of the population needs to be immune for herd immunity to take place. Herd immunity protects those in the community who cannot be vaccinated and for whom infection may be very serious, e.g., babies, seniors, those who are immunocompromised, and cancer patients. A recent study found that the herd immunity threshold for the novel coronavirus is around 60-80%, <sup>43</sup> which would require very significant vaccine adoption.

37. It is also currently unknown whether the vaccines that are pending FDA approval prevent infection or infectiousness, or whether they just help prevent takers from getting seriously sick. Thus, it is possible that even if the vaccines prove to be safe and effective, they will not prevent individuals who have received the vaccine from catching the virus and passing it to others. Further, neither of the front-runners have been tested yet in children, whom alone constitute around 20% of the United States population, and about 25% of the population in the counties from which a Waco jury would be pooled. 44 Even were the

<sup>&</sup>lt;sup>42</sup> Ex. 39, Jennifer Kendall, Gov. Abbott says COVID vaccine will not be mandatory for Texans, *Fox7 Austin*, Nov. 24, 2020, <a href="https://www.fox7austin.com/news/gov-abbott-says-covid-vaccine-will-not-be-mandatory-for-texans">https://www.fox7austin.com/news/gov-abbott-says-covid-vaccine-will-not-be-mandatory-for-texans</a>.

<sup>&</sup>lt;sup>43</sup> Ex. 41, Ananya Mandal, COVID-19 herd immunity threshold far higher than previously thought, say researchers, *News Medical*. Dec. 4, 2020, <a href="https://www.news-medical.net/news/20201204/Herd-immunity-threshold-far-higher-than-previously-thought-say-researchers.aspx">https://www.news-medical.net/news/20201204/Herd-immunity-threshold-far-higher-than-previously-thought-say-researchers.aspx</a>.

<sup>44</sup> Ex. 29, U.S. and World Population Clock, United States Census, <a href="https://www.census.gov/popclock/">https://www.census.gov/popclock/</a> (Last Accessed Dec. 9, 2020). A news briefing to announce the Census 2020 Demographic Analysis will take place on December 15, 2020. Ex. 42, Census Bureau Hosts News Briefing to Announce 2020 Demographic Analysis Estimates,

vaccine to be given to young adults (i.e., teenagers under 18 years old), this would only reduce the population of minors to whom the vaccine would not be given by about a third. And this further does not take into account other vulnerable populations who are not currently eligible for the vaccine, including pregnant women.

- 38. Additionally, both vaccines (Moderna and Pfizer) for which EUA is currently being sought require two doses each to be administered four and three weeks apart, respectively, to achieve an optimal (and the reported) immune response one to two weeks following the second dose. The requirement of two doses over a period of time not only reduces the number of individuals who will be vaccinated in 2021, but also makes it logistically impossible that herd immunity will occur in spring 2021 as a result of the vaccines—even if vaccine supply, logistics, and public distrust were not an issue (each are). Here
- 39. As such, it is my opinion that a vaccine will not materially change the risk of SARS-CoV-2 transmission at a trial regardless whether it is scheduled for January, March, April, or even summer of 2021.
- 40. It is further my opinion that even were vaccine availability, efficacy re transmission, and logistics not a concern, a COVID-19 vaccine would still not materially

United States Census, Dec. 1, 2020, <a href="https://www.census.gov/newsroom/press-releases/2020/news-briefing-demographic-analysis.html">https://www.census.gov/newsroom/press-releases/2020/news-briefing-demographic-analysis.html</a>; Ex. 43, Quick Facts, U.S. Census Bureau, <a href="https://www.census.gov/quickfacts/fact/table/">https://www.census.gov/quickfacts/fact/table/</a> (July 1, 2019 Estimates) (Last Accessed Dec. 10, 2020).

<sup>45</sup> Ex. 44, Vaccines and related biological products advisory committee meeting Dec. 10, 2020, FDA Briefing Document, Pfizer-BioTech COVID-19 Vaccine. https://www.fda.gov/media/144245/download.

<sup>46</sup> Ex. 45, Frequently asked questions about COVID-19 vaccination, CDC, <a href="https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html#:~:text=All%20but%20one%20of%20the,vaccine%20uses%20one%20shot">https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html#:~:text=All%20but%20one%20of%20the,vaccine%20uses%20one%20shot</a>. (Updated Dec 3, 2020).

change the risk of SARS-CoV-2 transmission at a trial in 2021 absent mandatory inoculation of all trial participants.

## VIII. CONDITIONS IN WACO, TEXAS AND COURT LAYOUT

41. As part of forming my analysis, I considered the conditions (demographic and COVID-19) in Waco, Texas and the surrounding counties from which jurors may be pooled, as well as the court layout. My findings as to the conditions and court layout are briefly summarized below.

## A. COVID-19 Positive Test Rates in Waco, Texas and Surrounding Counties

- 42. The following counties in the Western District of Texas are those from which a potential jury for trial occurring in the Waco Division of the U.S. District Court for the Western District of Texas are pooled: Bell, Bosque, Coryell, Falls, Freestone, Hamilton, Hill, Leon, Limestone, McLennan, Milam, Robertson, and Somervell.<sup>47</sup>
- 43. The currently reported COVID-19 prevalence as of December 8, 2020 in each of these counties is shown in the chart below. Of the counties that fall within the Waco Division of the Western District of Texas, only Bell and McLennan counties have their own health departments. Active case numbers, as well as the seven-day averages, are reported for Bell and McLennan by their respective health departments. <sup>48</sup> Bell and McLennan Counties

<sup>&</sup>lt;sup>47</sup> Ex. 46, Jury Service FAQs, U.S. District Court—Western District of Texas, <a href="https://www.txwd.uscourts.gov/jury-information/jury-service-faqs/">https://www.txwd.uscourts.gov/jury-information/jury-service-faqs/</a> (Last Accessed Dec. 9, 2020) ("Where will I serve as a juror?").

<sup>48</sup> Ex. 47, Bell County COVID-19 Statistics.

https://app.powerbi.com/view?r=eyJrIjoiNDA5MzNkMmMtN2Q4Ny00OThiLTg1ZTgtMjk
5ZmNmZTk5M2ZiIiwidCI6IjdkNWZjNTgxLThhYjQtNDUxMi1hNjNhLTUyYzVhZWU4
OTA3NiJ9&pageName=ReportSectiona87e92fbd0895c0b5d73 (Last Accessed Dec. 9, 2020); Ex. 48, Waco-McLennan County COVID-19 Statistics.

https://covidwaco.com/county/ (Last Accessed Dec. 9, 2020).

together represent roughly 70% of the population of the counties from which the Waco Division jury is pooled. The other counties, save Somervell, are part of DSHS Region 7 (which includes 16 other counties as well which are not part of the Waco Division) while Somervell is one of 36 counties in DSHS Region 2/3. Active cases for these counties are posted on the Texas Department of State Health Services COVID-19 dashboard<sup>49</sup> but other data is not available.

Western D	District, Wa				
County	Pop.	% of USDC Pop	Active Cases	Prevalence Per 100,000	Prevalence Rate (%)
Bell	362,924	40.9%	1,431	394	0.394%
Bosque	18,685	2.1%	62	332	0.332%
Coryell	75,951	8.6%	2,667	3,511	3.511%
Falls	17,297	1.9%	81	468	0.468%
Freestone	19,717	2.2%	40	203	0.203%
Hamilton	8,461	1.0%	55	650	0.650%
Hill	36,649	4.1%	164	448	0.447%
Leon	17,404	2.0%	53	305	0.305%
Limestone	23,437	2.6%	96	410	0.410%
McLennan	256,623	28.9%	1,284	500	0.500%
Milam	24,823	2.8%	26	105	0.105%
Robertson	17,074	1.9%	557	3,262	3.262%
Somervell	9,128	1.0%	24	263	0.263%

<sup>&</sup>lt;sup>49</sup> Ex. 49, Texas Department of State Health Services (DSHS) Counties COVID-19 Statistics.

https://txdshs.maps.arcgis.com/apps/opsdashboard/index.html#/ed483ecd702b4298ab01e8b9cafc8b83 (Last Accessed Dec. 9, 2020).

<sup>&</sup>lt;sup>50</sup> Ex. 47, Bell County COVID-19 Statistics.

https://app.powerbi.com/view?r=eyJrIjoiNDA5MzNkMmMtN2Q4Ny00OThiLTg1ZTgtMjk5ZmNmZTk5M2ZiIiwidCI6IjdkNWZjNTgxLThhYjQtNDUxMi1hNjNhLTUyYzVhZWU4OTA3NiJ9&pageName=ReportSectiona87e92fbd0895c0b5d73 (Last Accessed Dec. 9, 2020); Ex. 48, Waco-McLennan County COVID-19 Statistics.

https://covidwaco.com/county/ (Last Accessed Dec. 9, 2020); Ex. 49, Texas Department of State Health Services (DSHS) Counties COVID-19 Statistics.

https://txdshs.maps.arcgis.com/apps/opsdashboard/index.html#/ed483ecd702b4298ab01e8b9cafc8b83 (Last Accessed Dec. 9, 2020).

Western	District, Wa				
County	Pop.	% of USDC Pop	Active Cases	Prevalence Per 100,000	Prevalence Rate (%)
Total	888,173		6,540		
Weighted Average				736	0.736%
Texas	28,995,881		203,203	701	0.701%
USA	330,690,043		6,556,733 <sup>51</sup>	1,983	1.983%

44. I understand that individuals from out-of-district (and out-of-state or even country) will be involved as part of the trial team, and that for many air travel will be necessary.

### **B.** Courtroom Layout

- 45. As part of my assessment and proposal of safety precautions, I visited the Federal Courthouse for the U.S. District Court for the Western District of Texas, Waco Division, including Judge Albright's courtroom. I considered matters such as room size, location of key trial elements such as the Court's bench, the witness box, the open area between counsel's table, the bench, and the jury box, and the gallery, entrances and exits, and common areas.
- 46. In my opinion, the courthouse and its various rooms—including the courtroom, the visiting judge or axillary courtroom, the jury room, the jury deliberation room, the witness waiting area, and the jury assembly room—provide ample spacing for social distancing and are set up in a manner to provide the necessary rooms for trial, overflow (if needed), jury

<sup>&</sup>lt;sup>51</sup> Ex. 50, Worldometer, Coronavirus statistics, United States. https://www.worldometers.info/coronavirus/country/us/ (Last Accessed Dec. 9, 2020).

selection, jury room, and jury deliberations, with additional spaces for "break out" rooms for the individual parties.

47. I was particularly impressed by the precautions already put into place by the Court in and around the courtroom, including plexiglass barriers around the witness box, distancing between the two counsel's table, the lectern, the jury box, and the Court, as well as self-assessment health signage around the courthouse and a temperature check upon entering. Hand sanitizer was readily available and signs reminding those in the building to social distance were appropriately placed.

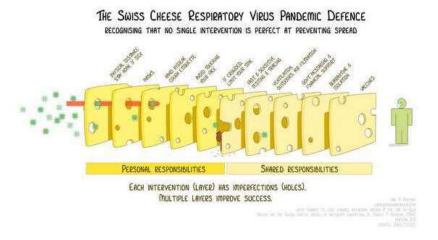
#### IX. VERY LOW RISK FROM TRIAL IN WACO, TEXAS IN JANUARY 2021

- 48. Based on the above-mentioned considerations, and my 40 years of experience, it is my opinion that there is very low risk of SARS-CoV-2 spread posed from a trial in Waco, Texas in January 2021, provided that the trial participants follow precautions as discussed in Section IX below.<sup>52</sup> For example, the risk posed by a trial in Waco conducted with appropriate safety precautions would be materially lower to all participants than the risks they face when they engage in other routine activities that remain commonplace in Texas despite the pandemic, such as eating at restaurants, going to movie theaters and bars, attending football games or other sporting events, or attending in-person schooling.
- 49. Further, as discussed in greater detail above, in my opinion, the anticipated approval and roll out of vaccines will not materially reduce the risk of a trial in Waco (or Austin) if the trial is postponed to March or April 2021 versus January 11, 2021.

<sup>&</sup>lt;sup>52</sup> There is no such thing as a "no risk" activity. The only conceivable method to provide for no risk of SARS-CoV-2 transmission would be for an individual to remain in his or her own home, alone, and without any outside contact. What we often consider "safe" are activities or conduct that involve only a very low or negligible risk of harm.

### A. Proposed Safety Protocol to Protect Against Spread of SARS-CoV-2 Virus

- 50. I have been asked by counsel for Plaintiff to provide a proposed safety protocol to protect against the spread of the SARS-CoV-2 at trial. These protective measures are for the purpose of protecting the Court and staff, the public, and the parties from infection should any of the trial participants be both infected with the SARS-CoV-2 virus and infectious.
- 51. Public health experts and epidemiologists refer to a "swiss cheese" model of prevention.<sup>53</sup> Despite the holes in each individual piece of swiss cheese, a stack of unique swiss cheese slices will create an impermeable barrier—similarly, although no one COVID-19 prevention method is perfect, by applying many methods simultaneously, the virus cannot get through all of the "holes." This model is depicted pictorially below.



- 52. My proposal is consistent with and implements such a model.
- 53. Additionally, in considering the proposed safety protocol, I have (among other things) considered safety measures that have been implemented at other recent trials in Texas,

<sup>53</sup> Ex. 51, Siobhan Roberts, The swiss cheese model of pandemic defense. *The New York Times*. Dec. 5, 2020 (Updated Dec. 7, 2020), <a href="https://www.nytimes.com/2020/12/05/health/coronavirus-swiss-cheese-infection-mackay.html">https://www.nytimes.com/2020/12/05/health/coronavirus-swiss-cheese-infection-mackay.html</a>.

and have also considered safety measures that are currently being implemented in medical settings.

- 54. My proposed safety protocol, which I believe to be highly conservative and which includes redundancy using the "swiss cheese" model, is as follows:
  - (A) N95 or KN95 masks for all persons while in the courtroom (or jury room and any used auxiliary or overflow rooms used by trial participants), to be worn at all times except for:
    - a. The Court, while maintaining an at least 6-foot distance from all other persons;
    - b. Witnesses, only while in the witness box, while maintaining an at least 6-foot distance from all other persons, and behind a plexiglass or similar protective barrier;
    - c. The questioning attorney, while maintaining an at least 6-foot distance from all other persons;
    - d. Other than the Court, persons listed above not wearing face masks should wear face shields.<sup>54</sup>
  - (B) Plexiglass or similar protective barrier around the witness stand;
  - (C) Social distancing, including a limit on the number of individuals inside the courtroom at any time:

<sup>&</sup>lt;sup>54</sup> This should not be interpreted as offering a face shield as an alternative to masks for all persons in the courtroom. Rather, it provides an additional layer of protection for those who will not be wearing masks because they are in the specifically itemized group of individuals. Should others wish to wear face shields, this would be in addition and not in lieu of face mask. 52. Considerations wearing masks. CDC. Ex. for https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cloth-face-coverguidance.html (Updated Dec. 7, 2020).

- Each side should be limited to 5 individuals in the courtroom at a time, which includes party representatives, counsel, and litigation staff;
- Availability of an overflow room in the courthouse for additional individuals as necessary with a video feed of the trial to reduce the number of individuals in the courtroom;
- c. A maximum number of jurors to be selected after the jury selection process based on the availability for social distancing, and using the space available in both the jury box and courtroom gallery, or other similar large space to accommodate social distancing; based on my conservative estimation after visiting the courtroom and taking measurements for social distancing purposes, it is my opinion that at least 12 jurors could be in the courtroom while still maintaining social distancing;
- d. Lunch brought in for all jurors daily to avoid unnecessary exposure to those outside the courthouse during lunchtime;
- e. Use of the auxiliary courtroom or other similar large space as the juror room to provide a larger space for social distancing;
- f. Social distancing in other communal spaces; and
- g. Maximum of 2 riders at a time in each elevator.
- (D) Limited use of bench conferences;
- (E) HEPA air purification systems;

- a. Such systems should be portable, industrial-grade HEPA filter units with the collective filtration rate in the range of 300-800 ft<sup>3</sup>/min to augment removal of respirable particles as needed;
- (F) Daily surface cleanings;
- (G) Disinfectant cleaning of the witness box and witness microphone at the conclusion of each witness's testimony;
- (H) Hand sanitizer containing at least 60% alcohol by volume stationed throughout the courtroom, jury room, and any used auxiliary or overflow rooms;<sup>55</sup> Hand sanitizer stations should be positioned near the main entrances of each room used for the trial;
- (I) Electronic exhibits, with the exception that a witness on the witness stand may have his or her own exhibit notebook or binder;
  - a. Physical exhibits will not be passed to the jury;
- (J) Daily health screening (self-reporting) and temperature checks with any person exhibiting a temperature greater than 100.4° not allowed in the building;
- (K) COVID-19 PCR testing for all party trial participants (both from in-state and out-of-state, including attorneys, witnesses, and party representatives) to take place within 5 days prior to trial and with confirmed negative results prior to trial; and

<sup>&</sup>lt;sup>55</sup> Ex. 53, FDA Statement, Coronavirus (COVID-19) Update: FDA takes action to protect public health; increase supply of alcohol-based hand sanitizer. Released June 1, 2020, <a href="https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-takes-action-protect-public-health-increase-supply-alcohol-based#:~:text=If%20soap%20and%20water%20are,or%20ethyl%20alcohol.

- (L) Daily rapid COVID-19 testing as possible for both party trial participants and the jury, with negative results obtained before entry to the courthouse.
- 55. Because my proposed safety protocol follows the "swiss cheese" model, none of the above precautions are individually mandatory in a proper protocol, but rather provide for safety redundancies in the aggregate. A safe protocol with very minimal risk of SARS-CoV-2 transmission may include fewer than each of the items listed, so long as a critical number of the protocol items are included, with masking and social distancing forming the foundation of any implemented protocol.
- 56. I understand that the above protocol includes all of the safety protocols implemented in the *MV3 v. Roku* trial<sup>56</sup> that was successfully held in October 2020 before this Court, with some additional measures that will provide participants with even more protection. For the sake of clarity, I believe that even if not all of the extra precautions set forth above are implemented, there would still be a very low risk of infection posed by trial in January. In this regard, my proposal is intentionally very conservative, and is intended to minimize (to the greatest extent reasonably possible) any risk to the participants.

box; (2) limitation on the number of attorneys for each party at their respective counsel tables; (3) requirement that all persons in the courtroom must wear masks, with the exception of the Court, testifying witnesses and directing and cross-examining counsel while at the lectern; (4) social distancing of attorneys and staff near the rail and for spectators in the courtroom seating area; (5) use during trial of only electronic versions of exhibits and demonstratives with the exception that testifying witnesses may use an exhibit notebook while on the witness stand; (6) limits on the number bench conferences; (7) prohibition on handing any exhibits or demonstratives to the jury; (8) use of the auxiliary courtroom as the jury room; (9) disinfectant cleaning of the witness box and microphone at the conclusion of each witnesses' testimony; (10) provision of hand sanitizer in the areas immediately adjacent to the courtroom, auxiliary courtroom and any overflow spaces; and (11) providing lunch for the jurors so they do not have to leave the courthouse during the trial day.

# B. Experiences From Recent Jury Trials In Waco and Other Federal Courts in Texas Support My Conclusions

- 57. I understand that there have been 3 trials conducted at the U.S. District Court for the Western District of Texas, Waco Division since the courthouse was reopened in September 2020.<sup>57</sup> During my assessment of the courthouse and courtroom, I saw the manner in which the courtroom and courthouse were rearranged to include safety measures. In my opinion, each of the measures taken in the courthouse were implemented thoughtfully and with high regard for public health. I have further been informed of the additional safety measures taken during actual trial. There were no reported infections or transmissions from any of these trials.
- 58. I also understand that there have been numerous jury trials in federal courts in Texas since September 20, 2020, only one of which is reported to have resulted in any of the participants being infected. Based upon public reports, I understand that the one exception, the trial in *ResMan LLC v. Karya Property Management LLC*, No. 4:19-cv-00402, which took place in Sherman, Texas did not include the use of N95 or similar masks, COVID-19 testing, or daily rapid testing as I have proposed here.<sup>58</sup>
- 59. It is my opinion that if the safety protocol I have proposed is followed, the risk of SARS-CoV-2 spread posed from a trial in Waco, Texas in January 2021 is very low. Further, it is my opinion that the anticipated approval and roll out of vaccines will not

<sup>&</sup>lt;sup>57</sup> Ex. 54, Daniel Siegal, WDTX judge says virus case drop means trials start soon. *Law360*. Aug. 19, 2020, <a href="https://www.law360.com/articles/1302606/wdtx-judge-says-virus-case-drop-means-trials-start-soon">https://www.law360.com/articles/1302606/wdtx-judge-says-virus-case-drop-means-trials-start-soon</a>.

<sup>&</sup>lt;sup>58</sup> Ex. 55, Katie Buehler, Texas Patent Trials Halted Due to COVID-19 Spike. *Law360*. Nov. 20, 2020, <a href="https://www.law360.com/articles/1330855/texas-patent-trials-halted-due-to-covid-19-spike">https://www.law360.com/articles/1330855/texas-patent-trials-halted-due-to-covid-19-spike</a>.

materially reduce the risk of a trial in Waco (or Austin) in March or April 2021 versus January 2021.

#### X. RIGHT TO SUPPLEMENT

- 60. I reserve the right to supplement and/or amend my declaration and opinion as additional facts are uncovered, including changing conditions in the United States between now and January 2021.
  - 61. Executed on December 10, 2020.

I declare that the foregoing is true and correct based on my personal knowledge of the matters discussed in this declaration, or that I have looked into the matters and believe them to be correct based on the best of my knowledge after a reasonable investigation.

Catherine L Troisi Digitally signed by Catherine L Troisi Date: 2020.12.10 17:55:23 -06'00'

Catherine L. Troisi, Ph.D.